United Nations E/C.14/1999/L.3

Economic and Social Council

Distr.: Limited
15 April 1999

Original: English

Committee on Energy and Natural Resources for Development
First session
5–16 April 1999
Agenda item 6 (a)
Issues related to assessment and management of land and water resources on an integrated basis: contribution to the preparatory process for the eighth session of the Commission on Sustainable Development on integrated planning and management of land resources and on agriculture

Draft resolution submitted by the Vice-Chairman, Mr. M. Matuszak, on the basis of informal consultations

Report of the Secretary-General on issues related to the spatial planning of land (including minerals) and water resources

The Committee on Energy and Natural Resources for Development,

1. *Takes note with appreciation* of the report of the Secretary-General on issues related to the spatial planning of land (including minerals) and water resources;[1]

2. *Requests* the Secretary-General to prepare a report, based on the report referred to in paragraph 1 above and taking into account the suggested revisions contained in the annex to the present resolution, and to make it available to the Commission on Sustainable Development at its eighth session as a background document on integrated land management.

[1] E/C.7/1998/5.

99-10687 (E) 150499

Annex

Suggested revisions to the report of the Secretary-General on issues related to the spatial planning of land (including minerals) and water resources (E/C.7/1998/5)

I. Introduction

A paragraph should be added to address the concerns expressed in the inter-sessional strategy paper of the Committee on Natural Resources,[a] about the serious implications for society as a whole and the life-support systems on which it is based if the looming water crisis with its four basic components — water quality, water quantity, urbanization and land degradation — is allowed to develop into a full-scale crisis. Such a crisis, owing to the close interrelationship between fresh water and land use, would be felt in many different societal sectors, including human health, food security, economic production and biological diversity.

A summary of the recommendations of major international meetings on the integration of land and water management, such as those held at Mar del Plata, Dublin and Rio de Janeiro, should be included.

II. Current and emerging management issues

References to the finite nature of water and the looming water crisis should be included to balance paragraphs 7 to 9 on land limitations.

Land-use planning and development need to take into consideration the finite nature of water and apportion projected needs in a coherent manner; this should be discussed.

A reference to forest resources should be included.

In paragraph 7, the following could be considered: Forests in the main help to provide a balance between life-support systems within the ecosystem. Deforestation tilts this balance and exposes the ecosystem to ever-increasing degradation. The role of forestry in land use and in land management techniques should therefore not be underestimated. The interdependency of forestry and agriculture in the lives of rural people is now becoming an issue which Governments must resolve in an integrated manner.

In paragraph 9, a stronger reference to the misuse of agricultural chemicals should be considered:

Between paragraphs 10 and 11, the following text should be inserted:

> The allocation of scarce water resources among competing uses has fundamental effects on human welfare, socio-economic development and the protection of ecosystems. The provision of adequate amounts of water for basic human needs should be incorporated into the formulation and implementation of policies for water resource development and allocation. In this context the equitable and sustainable allocation of water resources is an essential element of rural and urban development strategies aimed at poverty alleviation through generation of employment, income and productivity. Such strategies should be based as much as possible upon community participation at the lowest appropriate levels, taking into particular account the role of women in rural and urban communities as ultimate managers of water resources in both household and agricultural use. Such approaches require specific policies to improve local institutional capacity and promote human resources development.

[a] E/C.7/1996/6 and Corr.1, paras. 13–30.

Economic evaluations need to consider positive and negative impacts on both human and ecosystem health. To the extent that subsidies are required to maintain public health and equitable access, they should be clearly targeted to the intended beneficiaries and aligned with rural development strategies. Additional funding, targeted mainly to peri-urban and rural areas, may also be required to implement such strategies. The integration of water resources development and management with land-use planning is also essential to promote stabilization of rural populations through the alleviation of rural poverty and promotion of local employment opportunities in the productive use of water and land.

III. Actions to improve and enhance the spatial planning of land and water resources

A paragraph should be added to address the following concern:

While water moves through the landscape from the watershed to the mouth of the river according to natural laws, climate and topography, the societal sectors in the river basin depend on access to water and at the same time influence the quality and quantity of the water accessible to those downstream. As stressed by the Harare expert group, integrated water resource management is therefore essential for integrating and reconciling interests in the river basin — whether national or international — with regard to water quality, quantity and the aquatic ecosystems. A constructive dialogue needs to be made possible at the basin level to develop consensus between land and water users and stakeholders. Strategies should be specific about methods of pollution avoidance to ensure sequential water use downstream. The integration between management and use of land and water and waste management should be reflected in the approach to human health, nutrition, employment, poverty alleviation and ecosystem integrity.

A. Integration of land and water resources management into national socio-economic strategies

The inclusion of an additional box on the Murray-Darling basin land and water management initiative in Australia is recommended.

Greater attention should be paid, possibly in an additional paragraph, to grassroots participatory approaches and gender issues in this section.

B. Land, water and food security

The concept of food security needs to be re-evaluated to take into account water shortages and to focus on the meeting of nutritional needs through crop diversification and trade, as appropriate; the concept of long-term sustainability of the food production system should incorporate soil and water conservation, not focus on production level only.

Traditional practices relating to agriculture need to be acknowledged and appropriately addressed.

Extension services to facilitate the adoption of water-saving practices in agriculture need to be strengthened.

Small-scale irrigation efforts (for example, groundwater) need to be reviewed.

C. Land, water and health

The need for measures to encourage sustainable approaches to agricultural production, including organic agriculture, should be discussed.

An analysis of the contamination of land and water by harmful trace elements and heavy metals such as mercury used for the amalgamation of gold in artisanal and small-scale mining should be included.

Up-to-date information about health risks posed by contaminated land and water resources should be provided.

The disposal of solid, liquid and toxic wastes and their impacts on basin hydrology should be considered.

D. Protection of land and water ecosystems

The first half of the paragraph will be retained. The relationship between land and water development and its implications for the ecosystem may be summarized as discussed in paragraphs 60 to 66 of the report of the Harare expert group.

The paragraph could be divided into two paragraphs, one focusing on international agreements (several more need to be added, including the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and one dealing with an evolution of the potential need for policy and institutional re-evaluation in the light of treaty obligations.

International cooperation needs to be evaluated in the cases of shared watercourses, and cooperation between upstream and downstream countries needs to be encouraged; the Convention on the Law of the Non-Navigational Uses of International Watercourses merits analyses in view of its relevance to land use as well as to access to water and sanitation and environmental questions; successful cooperation examples such as the Zambezi River Authority might be considered.

E. Information management and monitoring systems

Hydrological information needs to be made available between neighbouring countries in the same manner that meteorological information is made available through the World Meteorological Organization.

Hydrologic and hydrometeorologic data need to be accessible to the public on a timely basis, especially for flood and drought management.

F. Institutional and legal framework and capacity-building

The section could be divided, placing paragraphs 32 to 34 in a section on capacity-building and paragraph 35 in a section on gender.

The different strategies for local participation and basin-wide integration need to be clarified in paragraphs 27 and 28.

The potential for local participation in the construction, operation, maintenance and management of waterworks should be evaluated.

Paragraph 30 is a general paragraph, and any specific reference to water, soil or minerals is unhelpful and should therefore be deleted.

In paragraph 31, the channelling of financial resources through basin management organizations should be examined.

Economic analysis of national and international river basin management should be encouraged.

H. Mobilization of financial resources

The importance of streamlining regulatory and institutional structures and making them transparent so as to mobilize all available resources needs to be evaluated.

In paragraph 38, after the words "Developing countries", the words "and countries with economies in transition" should be added.